

Mr. Alan Walts, Director
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

December 7, 2016

Dear Mr. Walts:

Thank you for your reply to my letter and petition for an Environmental Impact study regarding a proposed massive volcanic sulfide mine and processing operation proposed by Aquila Resources, Inc. referred to as their Back Forty Project which is also identified as The Menominee River — Shaky Lakes Recreational Area Mine in Menominee County, Michigan. Additionally, attached copies of letters written by Mr. Pierard, Chief of the NPDES Programs Branch, Ms. Tinka Hyde, Director, Water Division and Ms. Genevieve Damico, Chief Air Permits Division are also very helpful in knowing the EPA's interest in up to the 'high standards' needed to evaluate the high risk presened by this mine to our much-threatened environment.

Several important reasons were considered resulting in a decision to ask for Environmental Protection Agency involvement. The application submitted to the Michigan Department of Environmental Quality reportedly consisted of 22,000 pages many of which contained engineering models, statements of compliance, not substantiated with facts or data required by law much of which was permitted to be amended in the review process administratively rather than by sound geological, environment studies or the use of more accurate engineering models. The overall wetland study, as you are already aware, for instance was incomplete, omitting trout streams, dozens of seeps, swamps, springs and the balance of the area's aquifer on the Wisconsin side of the river also consisting of lakes, rivers, streams, swamps and dozens of seeps. The 'dewatering' of the related aquifer in Menominee and Marinette Counties will have a severe impact on area wells, surrounding public and privately owned forests, migratory waterfowl, wild life, delicate ecosystems, aquatic life including Wisconsin and Michigan regenerating sturgeon and small mouth bass programs, etc.

The intention to discharge 1,520,000 gallons of polluted water daily into the Menominee River laced with varying amounts of contaminants such as sulfuric acid, lead, cyanide and other minerals and chemicals, etc. used in the processing of mined minerals and other comments will be listed on an attachment to this letter. It must be noted here, however, that Michigan and Menominee County has jurisdiction of land only up to the East bank of the Menominee River and Wisconsin and Marinette County has jurisdiction from the West Bank to the East Bank of the river meaning all water discharged into the river from the Michigan side is trespassing on property under the jurisdiction of the State of Wisconsin.

The MDEQ and MDNR; both departments along with other responsible people, are deeply involved in the Flint Michigan water crisis and it is the general opinion of residents of both states, these departments and others in the State lack the talent and expertise to evaluate a permit of this type in an area where mistakes can lead to irreversible damage affecting so many and desperately need the system of checks and balances provided by the ERPA, and without the EPA's intervention cannot be trusted to represent the interests of the residents and property owners in Marinette County Wisconsin and Menominee County Michigan.

The State of Michigan Attorney General's office has indicted a total of 8 directly responsible high level State and Flint City officials including several MDEQ and MDNR officials and 'vows' there will be more incitements to follow. Expert maneuvering by the State Governor shifted a degree of responsibility to the Federal EPA. The Federal Government is expected to bear a significient portion of Flint's water problem cost in addition to the \$40+ million already provided to the City of Flint by the state of Michigan. An assessment places the potential cost of fixing the damage to Flints water distribution at 713 million. Many feel the state of Michigan should be responsible for all of the costs to help fix a problem that was created by negligence and acts of completely irresponsible State of Michigan officials. With a record like this and past mining industry practices of leaving toxic waste dumps and acid mine drainage problems behind for others to deal with does not instill 'trust' in the mining industry in addition to making the State a ' partner' of Aquila Resources, Inc. once the permit is issued that will be completely void of much needed 'checks and balances'.

MDEQ and MDNR personnel processing the mining permit application submitted by Aquila Resources are fine people wanting to do the best they can as impartially as possible, however, there had been indications, people higher than those in positions at the permit evaluation level; at higher levels in state government, had made their decisions of approving Aquila Resources permit well in advance of the process currently being followed under auspices of the State's Economic Development program.

Enclosed is a 'comment' sheet containing factors that affect both the States of Wisconsin and Michigan principally due to the proposed mine site being 'on the Menominee River'.

Sincerely,
Ex. 6 - Personal Privacy

Encl:

COMMENTS

ATTACHMENT TO Ex. 6 - Personal Privacy
TO

ALAN WALTS, DIRECTOR OFFICE OF ENFORCEMENT AND COMPLIANCE DATED DECEMBER 7, 2016

GENEDRAL CONSIDERATIONS FOR NEPA involvement in Aquila Resources, Inc. – Back Forty Project M10059945 permit application supporting a petition dated October25, 2016 "Request for 'Environmental Impact Study' for Menominee County Michigan, Marionette County Wisconsin and the Menominee River as a principal waterway between the States of Michigan and Wisconsin and the displacement and destruction of Native American Ancestral burial sites and artifacts."

SECTION 1

- A number of Menominee County residents whose names were affixed to the
 petition submitted to various Federal, State and County officials were active
 participants in crafting Michigan's Part 632 mining law and were assured by Mr.
 Stephen Hoffman from the EPA who also attended workshop sessions to contact
 him in the event of any concerns or questions of situations which needed EPA
 involvement.
- 2. The MDEQ has ignored written certified public documents made by Aquila Resources, Inc. that they intend on simply amending their permit application to then include an underground portion to this mine, however, there is no mention of this intention in the permit submitted to the State of Michigan for approval.
- 3. The MDEQ has publicly stated that they suffer from a shortage of SOM personnel and the financial resources to sufficiently monitor and/or regulate any large project of this nature.
- 4. Aquila Resources permit application data ends at the ordinary high water mark on the Michigan bank of the Menominee River because Wisconsin has jurisdiction from the West to the East bank. Their permit application does not show concern for the significant negative impact of mine activity from the mine to the river's edge, the river itself and any area on the Wisconsin side including the continuation of the aquifer contiguous to both sides of the river. Michigan's permit review process leaves this entire area void since it lacks regulatory authority over water and land belonging to Wisconsin. Aquila Resources dewatering plan and other aspects of mine and processing operations or the State of Wisconsin does not show concern for this matter.
 - (a) MDEQ says this 'cone of depression' will extend into Wisconsin and will impact property there.
 - (b) This results in water taken from Wisconsin, polluting it and putting it back into the Menominee River they consider to be Michigan.

- (c) The same remains true with an air quality permit which will affect both Wisconsin and Michigan equally.
- 5. Ignored entirely by the permit application and the MDEQ's review is the presence of a geological fault not far downstream from the mine dewatering discharge point. This fault creates a sheer wall where the river depth goes down to 30+ feet with crevices to an unknown depth. The very nature of water born heavy metals will cause this area to accumulate high quantities of toxic waste; much higher than allowed by the MDEQ or EPA tolerances. This geological factor has been ignored by the MDEQ.
- 6. In correspondence from the MDEQ to Aquila; "Comment #37: EIA, Vol11A, Appendix D, Table 5.1: a number of groundwater sample locations had Gross Alpha Activity analysis results well over 15 pCi/l, but the combined radium 226 and 228 results do not account for more than a fraction of the Gross Alpha activity. Why was Uranium not included in the baseline sampling?
 - (a) Aquila's response to Comment #37: The parameter did not include Uranium. The 'parameters list' was reviewed in two meetings that took place in March and September 2007, prior to sampling. Attendees to both meetings included representatives from Aquila, MDEQ, ERM and MDNR Escanaba Forest Management Unit.
 - (b) The EPA should become involved as the State of Michigan failed to require listing Uranium and other highly carcinogenic, mutagenic and teratogenic elements and substances included in this permit that expose the community to added health hazards.
- 7. Michigan 324.63202 and Part 632 under legislative findings specifically states portions listed below:
 - (a) Nonferrous metallic sulfide deposits are different from the iron oxide deposits being mined in Michigan since sulfide minerals may react when exposed to air and water to form acid rock drainage. If the mineral products and waste materials associated with nonferrous sulfide mining operations are not properly managed and controlled, they can cause significant damage to the environment, impact human health, and degrade the quality of life of the impacted community.
 - (b) The special concerns surrounding nonferrous metallic mineral mining warrant additional regulatory measures beyond those applied to other types of mining operations.
 - (c) Nonferrous metallic mining shall occur only under conditions that assure that the environment, natural resources, and public health and welfare are adequately protected.
 - (d) The permit application submitted to the MDEQ by Aquila Resources and conversations neighboring private property owners had with MDEQ personnel whose property will be severely impacted by mine and materials processing

- operations; including the tailings pond immediately adjacent to their residential location admit to the hazard being severe, however, appear unconcerned about potential future consequences or bringing about future litigation.
- (e) By issuing a permit the MDEDQ is completely disregarding the main reason Part 632 was enacted. Quote: 324.63202 Leglaslative findings, Sec. 63202. "The legislature finds that: (e) Nonferrous metallic mineral mining may be an important contributor to Michigan's economic vitality. The economic benefits of nonferrous metallic mining shall occur only under conditions that assure that the environment, natural resources, public health and welfare are 'adequately' protected.
- 8. Knowledgeable Property owners of a contiguous 400-acre parcel and a mile of Menominee River frontage immediately North of Aquila's proposed mine site which has been 'family owned' for many generations back to 1918 comment on the permit application failed or ignored to include the following:
 - (a) Aquila Resources hydrological survey on the North omitted an active trout stream with a rate of thousands of gallons/minute at certain periods. The source of this trout stream is at the base of a hill where it is planned by Aquila Resources to put their tailings pond. This stream was called to the attention of the MDNR within the past year because of a problem created by clear cutting timber on state owned land adjacent to the planned tailings pond location.
 - (b) Aquila Resources hydrological survey in addition to the 'trout stream' omitted in (a) above also omitted the source of water flowing into/out of a wetland that is mostly dependent on the trout stream for its water source and dozens of small springs that flow into this stream.
 - (c) Omitted from the Aquila hydrological study is a stream that flows into the Shaky Lakes chain of lakes.
 - (d) North and West the survey omits dozens of seeps including one with a flow rate that flows for hundreds of feet parallel to the Menominee River that can be seen only at low water levels.
- 9. The overall effect of the discharge permit submitted by Aquila Resources overall purpose is to eliminate all or as much of the area's ground water as possible which will produce devastating ecological results and drastically effect private property owner's 'well water' for a considerable distance from the mine site. The above surface watershed flowing to the Menominee River and the below surface watershed flowing from the Northeast to portions of Shaky Lakes and the lower Menominee River.
 - (a) The 'discharge' permit appears to be a 'play' on words to disguise Aquila Resources real intention to 'dewater' the area and categorically should be under 'greater scrutiny' for it's more realistic purpose. The draft permit allows 1,520,000 gallons of water/day to be discharged into the Menominee River and

- equals 554,800,000 gallons a year just over the 2-3 years prior to operating as a mine and after.
- (b) The NDEQ appears to have ignored these facts and considers the following to be within the scope of the permit: "Storm water shall be defined to include all of the following non-stormwarer discharges; springs, uncontaminated groundwater; foundation or footing drains where flows are not contaminated with process materials such as solvents" ...
- 10. The permit application states it will take 22 years for water to equalize with the surrounding water table in the pit. That 22 years is longer than the 20 years 'post closure' for monies to be held in trust. A permit should require monies to be held in trust for a period of 20 years past the point of water reaching equilibrium considering that period of time where reactions continue to take place.
 - 11. Instead of producing another future 'super fund' project it would be wiser to prevent one.
 - 12. The mine site encompasses a parcel of land identified by the EPA and the State of Michigan as the "Shaky Lakes Savanna" which is recognized as an area of federally 'Threatened, Endangered Species' and 'Species of Special Concern'.
 - (a) Aquila's Resources permit admits species fitting these definitions have been identified within this area.
 - (b) This area is identified by the 1995 U.S. Environmental Protection Agency as, "Shaky Lakes Oak Savannah, a designated Natural Area, represents the northern range for a number of species. It is located within the several thousand Escanaba River State Forest, in the Upper Peninsula on the border with Wisconsin. It contains large areas of remnant oak-pine barrens and areas of northern pin oak-red oak savanna. Botanists discovered the unique community and began advocating for a natural designation of about 5000 acres in size. Five state threatened species including Oval-leaved Milkweed (Asclepius ovailfolia) and VCarsey's Rush (Juncus vasey) exist on the site.
 - 13. WISCONSIN MICHIGAN BORDER CONFLICT NECESSITATING EPA'S ATTENTION AND ENVOLVEMENT: Lack of Authority by State of Michigan to permit. AND Lack of Authority of Wisconsin DNR to enter into any agreement with persons and or the State of Michigan pertaining to the Menominee River in this location.
 - (a) The mining permit notes a 'discharge location' being: Menominee River at latitude 45.44993, Longitude 87.839075. The Wisconsin DNR cannot lawfully agree to any water discharge or pollution entering the Menominee River in the specific area noted in the permit application as they do not have the authority to enter any agreement related to the Menominee River in this area.
 - (b) The Wisconsin Constitution states: "Const. 1963, art 6 & 28; MCL 24.306 (1). An agency decision is not authorized by law if it violates constitutional or statutory provisions, lies beyond the agency's jurisdiction, follows from unlawful procedures resulting in material prejudice, or is arbitory and capricious.

(Northwestern Nat'l Gas Co. vs. Comm'r of ins, 231 Mich. App 483, 488, 586 NW2d 563 (1998).

- 14. Based on long standing boundary disputes between Wisconsin and Michigan, including treaties, the State of Wisconsin Constitution, certain State of Wisconsin statutes and a U.S. Supreme Court decision regarding the boundary for this area, a reasonable interpretation of the facts shows the MDEQ has no legal authority to issue a discharge permit for the area described in Permit No. M10059945. Rather; any discharge into the Menominee River in this section of the river should be regulated by the State of Wisconsin and not the State of Michigan. In this area, the State of Wisconsin's authority begins at the 'Ordinary High Water Mark' on the Michigan shore. And, not 'in' the river! As defined by legal dictionaries as well as the U.S. Army Corp of Engineers for non-tital waters under section 404 of the Clean Water Act and under Sections 9 and 10 of the Rivers and Harbors Act of 1899.
 - (a) The 'Ordinary high water mark' is not the river's edge but is defined as, "The ordinary high water mark means that line 'on the shore' established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas".
 - (b) A review of Wisconsin legal descriptions for this area shows property identified as a 'Government Lot' which is a lot that abuts the Menominee River. A Government lot does not extend the fee simple into the river but merely to the edge of the river. Wisconsin's legal descriptions in this area claims title to the Michigan shorelines 'ordinary high water mark
- 15. WISCONSIN CONSTITUTION BOUNDARIES ARTICLE 1X. Eminent Domain and Property of the State, "Jurisdiction on rivers and lakes; navigable waters".
 - (a) Section 1. The state shall have concurrent jurisdiction on all rivers and lakes bordering on this state do far as such rivers or lakes shall form a common boundary to the state and any other state or territory now or hereafter to be formed, and bordered by the same, etc.
 - (b) Section 2. Territorial property. The title to all lands and other properties which have accrued to the territory of Wisconsin by grant, gift, purchase, forfeiture, escheat or otherwise shall vest in the state of Wisconsin.
 - (c) Section 3. Ultimate property in lands, escheats. The people of the state, in their right of sovereignty, are declared to possess the ultimate property in and to all lands within the jurisdiction of the state, and all lands the title to which shall fall from a defect of errors shall revert to the escheat to the people.
- 16. U.S. Supreme Court State of Michigan v. State of Wisconsin 270 U.S. 295 (46 Ct. 290, 70 Led.595) No 19. Original March 1, 1926, Opinion Justice Sutherland delivered the opinion of the court. This is an original suit in equity, brought in this court to determine the boundary between the states of Michigan and Wisconsin from the

mouth of the Montreal River at Lake Superior to the ship channel entrance from Lake Michigan into Green Bay by the Enabling Act of June 15, 1836, c.99.5 Stat. 49 under which Michigan became a state in 1837. 5 Stat. 144, c.6.

- (a) Boundaries were clearly established that the territorial jurisdiction extended to the 'high water mark' of the West bank of the Menominee river and therefore would make it illegal for Michigan to permit and to regulate the discharge of water from the State of Michigan's West Bank into the Menominee River.
- (b) The Wisconsin Constitution and legal decisions do not allow the State of Wisconsin DNR to negotiate and or give away sovereign rights of the citizens of the State of Wisconsin. Any permit, therefore, must be within the realm of the Federal EPA as only the EPA can protect the citizens and health of both the States of Wisconsin and Michigan.
- 17. Permit No. M10059945 states, "Final Effluent Limitations, Monitoring Point 001A During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge a maximum of 1.52 MGD (MGD means million gallons per day) of treated mine drainage (Water once dirty or contaminated cannot be made not dirty or uncontaminated regardless of its treatment!) treated wastewater, and treated storm water from monitoring point 001A through Outfall 001. Outfall 001 discharges into the Menominee River at Latitude- 45.44993, Longitude- 87.83975. Such discharge shall be limited and monitored by the permittee as specified below:
 - (a) The permit would be for Outfall 001 discharges to the Menominee River at Latitude 45.44993, Longitude- 87.83975. The MDEQ limits the location for discharge point but fails to note a mine this large and this deep being just 75 feet from the Menominee River would by necessity need several discharge points based on size and proximity to the river and the amount of precipitation and fluctuating amounts entering the mine site and the amount of toxins that would be deposited via dust that would end up in the river is incalculable and is unaccounted for in this water discharge permit. The public has a right to know this information and once known and added to this permit would show the correct amount of toxins entering the river are far higher than the MDEQ has approved or provided for in this permit.
 - (b) The description of mine physical characters has changed from time to time ranging from an open pit mine 850 feet deep to 1250 feet deep and a supposition for a permit amendment for an 'in ground' mine at an undeterminable or undisclosed depth at a future date. Aquila and the MDEQ have omitted important facts regarding the composition of the ore deposit in question in their draft permit. It is a well-established fact that 'Volcanic Massive Sulfide' (VMS), the type of ore deposit being mined and processed here, is not similar to other type of ore typically mined in Michigan OR 'Processed' ON site'

and carries significant environmental issues specific to the serious long term pollution a VMS deposit always generates. The impact of 'acid mine drainage' will continue to plague many future generations and VMS is so different Michigan wrote into law Part 632, "it is a fact that VMS mines have caused significant pollution at thousands of sites in the U.S. and the rest of the world, so much so the U.S. Department of Interior and the U.S. Geological Survey created a special 363-page report warning of VMS mining toxic waste producing hazards.

- 18. State of Michigan's Upper Peninsula Major Tourist Attraction: For hundreds of miles from Escanaba, Michigan, along highway 2 to Iron Wood atLake Superior and from the City of Houghton on the Keweenaw Peninsula to Copper Harbor along Hwy 26 there is sufficient evidence to prove the lack of responsibility the mining industry has demonstrated in the past in the Upper Peninsula of Michigan and the lack of regulatory responsibility demonstrated by the State of Michigan to uphold a high standard of 'environmental' and 'economic' values. The attached map of "Michigan Northeastern Area Underground Mines and Explorations" show locations where 'tailings' from mine operations blight the countryside many of which continue to seep acid mine drainage which the state has, and continues to ignore.
 - (a) Torch Lake, Houghton County, Michigan NPL Site Narrative for Torch Lake. "Torch Lake is in Houghton County in the Upper Peninsula of Michigan. Copper mining companies dumped tailings into the 2,660 acre lake from the 1890's to as recently as 1969. About 20 percent of the original lake volume has been filled with wastes contaminating the lake sediments with copper. In 1972, cubic ammonium carbonate spilled into the lake from storage vats. Cancerous growth has been documented in two fish species. The public health department has issued a health advisory on fish consumption.
 - (b) This mining site was placed on the NPL in 1986 because the State of Michigan does not have an approved program under the Surface Mining Control and Reclamation Act of 1977 (SMCRA) and so is not eligible for SMCRA funds.
- 19. Enclosed with comments is a CD of aerial photos of the Menominee River showing the 'rapid flow' of water on May 2, 2002 and includes views of the proposed mine site overflowing the banks of the river for miles up and down stream including discharge points proposed in the Aquila permit application.
- 20. This will help to explain the inability of preplanning for occasional high water conditions for which there are no contingent plans of prevention or correction in any of the permit documents nor considerations by the MDEQ.

SECTION 2

The entire footprint of intended mining and processing operations included in the Aquila permit application being reviewed by the MDEQ encompasses will negatively impact and or

eliminate many significantly important North American Native Ancestral Sites as well as destroy irreplaceable native artifacts.

The intent of Aquila Resources to disregard or minimize the importance of this historical area is apparent by the lack of concern their permit application documents show and their refusal to address the concerns displayed by the Native American Community from the Keshena Reservation whose ancestors lived in the area for the past hundreds and perhaps thousands of years.

- A copy of the 15-page historical document compiled by the Keshena Reservation people
 is attached which explains the involvement of the Native American Community in the
 area of Aquila's proposed mining and minerals processing operations and any questions
 can be addressed to: Guy Reiter Representative of the Menominee Nation at 715-8532776.
- 2. The proposed mine site along the river will also eliminate a portion of the historical 'Military Highway' once used exclusively by the military from the Chicago Illinois Area to Mackinaw Island where a Fort was maintained.